



RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/927,616A

DATE: 01/29/2002

TIME: 12:16:05

Input Set : A:\Uw972731.app

Output Set: N:\CRF3\01292002\I927616A.raw

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3 <110> APPLICANT: Triplett, Eric W
 4 Herlache, Thomas C.
 6 <120> TITLE OF INVENTION: Biological Control of Crown Gall Disease
 8 <130> FILE REFERENCE: 960296.97273
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 C--> 11 <141> CURRENT FILING DATE: 2001-11-02
 13 <150> PRIOR APPLICATION NUMBER: 60/224,929
 14 <151> PRIOR FILING DATE: 2000-08-11
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 55 tggatcgata tacaaaagtg taatctcgcc actaacaaga gccgatccga ctccctcttac 180
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70 Met
71 1
73 gat aac aag gtt gcg aag aat gtc gaa gtg aag aag ggc tcc atc aag 647
74 Asp Asn Lys Val Ala Lys Asn Val Glu Val Lys Lys Gly Ser Ile Lys
75 5 10 15
77 gcg acc ttc aag gct gct gtt ctg aag tcg aag acg aag gtc gac atc 695
78 Ala Thr Phe Lys Ala Ala Val Leu Lys Ser Lys Thr Lys Val Asp Ile
79 20 25 30
81 gga ggt agc cgt cag ggc tgc gtc gct taagtgaaca tccggcggt 742
82 Gly Gly Ser Arg Gln Gly Cys Val Ala
83 35 40
85 gcggcaaacy taccgcgcac ttatgcctc gctttcaacy ggatgtttcg c atg gac 799
86 Met Asp
88 ttc gtc caa cga ttc gta atc gac cgc tct ttc cac ctg cgc tac tac 847
89 Phe Val Gln Arg Phe Val Ile Asp Arg Ser Phe His Leu Arg Tyr Tyr
90 45 50 55 60
92 agc ctg gac gcc tat cta tat cgc gca gtt gac cag gtc gcc tgg gac 895
93 Ser Leu Asp Ala Tyr Leu Tyr Arg Ala Val Asp Gln Val Ala Trp Asp
94 65 70 75
96 gca gac atc act cac aat cgc cta ttt tgg gac att tgg tca gca ttc 943
97 Ala Asp Ile Thr His Asn Arg Leu Phe Trp Asp Ile Trp Ser Ala Phe
98 80 85 90
100 atg cag ccg aga agt ctg gta gac gct gtt gag acg cta tcc gat tac 991
101 Met Gln Pro Arg Ser Leu Val Asp Ala Val Glu Thr Leu Ser Asp Tyr
102 95 100 105
104 gat ccc gac gaa gtg gcc gca gca atc gaa ggc atg tgc gag tcg ggc 1039
105 Asp Pro Asp Glu Val Ala Ala Ala Ile Glu Gly Met Cys Glu Ser Gly
106 110 115 120
108 atc atc gaa ccg gtg ggc ttg aaa gac cgc caa ttt gat cct ttg acg 1087
109 Ile Ile Glu Pro Val Gly Leu Lys Asp Arg Gln Phe Asp Pro Leu Thr
110 125 130 135 140
112 gta gag ctg tca cat gtg cca cag gca tgg gat tat cac ctg gtc tca 1135
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114 145 150 155
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117 Ser Arg Ile Asp Trp Ile Asn Tyr Leu Asp Gly Lys Asp Val Lys Arg
118 160 165 170
120 cag gac ctt gaa caa atg gac aag cat ttg tcg gag gag gct gtt ccg 1231
121 Gln Asp Leu Glu Gln Met Asp Lys His Leu Ser Glu Glu Ala Val Pro
122 175 180 185
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129 Ser Leu Val Pro Leu Thr Ala Phe Glu Phe Asn Asn Ser Ala Ser Val
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137 Ile Ile Thr Leu Leu Leu Asn Tyr Ala Ala Ala Lys Thr Asp Thr Val
138          240          245          250
140 aac atg tat gcc act ggc gag cat ctg cga aag gcc gtc cca tcc gga 1471
141 Asn Met Tyr Ala Thr Gly Glu His Leu Arg Lys Ala Val Pro Ser Gly
142          255          260          265
144 gga gcg cga cac ccc atc gaa ttc tac gtg gtt gtc ggc gat gag att 1519
145 Gly Ala Arg His Pro Ile Glu Phe Tyr Val Val Val Gly Asp Glu Ile
146          270          275          280
148 gca ggt atc gaa gct ggc gta tat cac tac aat gtt cgc cat cat cgg 1567
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152 ctc gat gct atc gaa ata gcg tcc acc tca ttg aaa gca ctg caa gag 1615
153 Leu Asp Ala Ile Glu Ile Ala Ser Thr Ser Leu Lys Ala Leu Gln Glu
154          305          310          315
156 gca agc tca gtg ctg ccc cga tca cgg tca aaa ccg ttc ggc ttt gct 1663
157 Ala Ser Ser Val Leu Pro Arg Ser Arg Ser Lys Pro Phe Gly Phe Ala
158          320          325          330
160 ttc att cat aca tgt cgg ttc gag cga agt atg ttt cgg tac cgc gaa 1711
161 Phe Ile His Thr Cys Arg Phe Glu Arg Ser Met Phe Arg Tyr Arg Glu
162          335          340          345
164 ccg cga agc tac cgt gtg atg cag ttt gat ctt ggg cat atc cat gcc 1759
165 Pro Arg Ser Tyr Arg Val Met Gln Phe Asp Leu Gly His Ile His Ala
166          350          355          360
168 aac gag gtt ttg gct gcc aaa atc ctc ggc ctc gat ttc agt gaa acc 1807
169 Asn Glu Val Leu Ala Ala Lys Ile Leu Gly Leu Asp Phe Ser Glu Thr
170 365          370          375          380
172 ttt tct gtg ccg gaa agc ata gtt gag agc gtc ttg acg ctc gat ccg 1855
173 Phe Ser Val Pro Glu Ser Ile Val Glu Ser Val Leu Thr Leu Asp Pro
174          385          390          395
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177 Phe Ile Glu Ser Ala Met Ser Ala Phe Val Val His Arg His Glu Asn
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181 His His Asp
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220 420 425
222 gaa tac gca tcg atc agt tgg cgg aga atg att ccc aat gtg gct gac 3071
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224 430 435 440 445
226 act atc gtc gtc acg ctc atc ggc gct act gca ctt cag gtg gcg tca 3119
227 Thr Ile Val Val Thr Leu Ile Gly Ala Thr Ala Leu Gln Val Ala Ser
228 450 455 460
230 aat gtt ctg atc acg ata ctg acc ctc aat atc gct ttt ctg aac ttt 3167
231 Asn Val Leu Ile Thr Ile Leu Thr Leu Asn Ile Ala Phe Leu Asn Phe
232 465 470 475
234 tgc tcg ctt atc tgc atg cac aat ctg aaa aga ggg gca aag gcc gac 3215
235 Cys Ser Leu Ile Cys Met His Asn Leu Lys Arg Gly Ala Lys Ala Asp
236 480 485 490
238 gta ttt gct gca atc gtc cgc gct gct tgc atg atg atc ggg gtc tac 3263
239 Val Phe Ala Ala Ile Val Arg Ala Ala Cys Met Met Ile Gly Val Tyr
240 495 500 505
242 ctg gcg ctt atc gcg gtc tcc gtc gcc acc ctc gaa ggt gca ccg cgt 3311
243 Leu Ala Leu Ile Ala Val Ser Val Ala Thr Leu Glu Gly Ala Pro Arg
244 510 515 520 525
246 acc caa acc att gct ttc ata gca ctg tct gcg ctc cgg ccg ttt gtg 3359
247 Thr Gln Thr Ile Ala Phe Ile Ala Leu Ser Ala Leu Arg Pro Phe Val
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250 gct gga tgg aat gct tac tgt gcg gag gtt ttt ttc gcc cag gga aaa 3407
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252 545 550 555
254 cga caa att gtg cga agc gtc atc acg aga tcg tcg ctg atc tat gca 3455
255 Arg Gln Ile Val Arg Ser Val Ile Thr Arg Ser Ser Leu Ile Tyr Ala
256 560 565 570
258 gga gtt aat ctg ctc ttt gtc ggg ctg tcg cat ttc gct ggc act caa 3503
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260 575 580 585
262 aat tcg atc ata tcg ctt ctc atc ggc gta tat ctt gct ctc ttc cac 3551
263 Asn Ser Ile Ile Ser Leu Leu Ile Gly Val Tyr Leu Ala Leu Phe His
264 590 595 600 605
266 aac gcc ctg gcc tac gcc aga atc ctg ccg acc gaa tgg agg ttc agt 3599
267 Asn Ala Leu Ala Tyr Ala Arg Ile Leu Pro Thr Glu Trp Arg Phe Ser
268 610 615 620
270 cgc cag gat ttg aag gat gtc ttc tca ctt cgg aag ctt gat ctg gtc 3647
271 Arg Gln Asp Leu Lys Asp Val Phe Ser Leu Arg Lys Leu Asp Leu Val
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280          655          660          665
282 atc gcg gtt ttt tat ttc ccg ttt ttc act ttg gtg gaa ttg acg agc 3791
283 Ile Ala Val Phe Tyr Phe Pro Phe Phe Thr Leu Val Glu Leu Thr Ser
284 670          675          680          685
286 gga ctt gcg att ggg ctt gga cgc tca gtc acc gaa cgt ttg att acg 3839
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308          770          775          780
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311 Tyr Leu Ala Ser Gly Val Ile Leu Ala Leu Ala Ala Val Leu Gly Ser
312          785          790          795
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324 830
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VERIFICATION SUMMARY

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L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date